

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

To: LEE, Keon-Joo Mihwa Bldg. 110-2, Myongryun-dong 4-ga, Chongro-gu Seoul 110-524 Republic of Korea
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Date of mailing <i>(day/month/year)</i> 18 OCTOBER 2004 (18.10.2004)
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Applicant's or agent's file reference P12220-PCT	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/KR2004/001678	International filing date <i>(day/month/year)</i> 08 JULY 2004 (08.07.2004)	Priority date <i>(day/month/year)</i> 09 JULY 2003 (09.07.2003)
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International Patent Classification (IPC) or both national classification and IPC IPC7 H04B 7/26
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Applicant SAMSUNG ELECTRONICS CO., LTD. et al

<p>1. This opinion contains indications relating to the following items:</p> <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application. </div> <p>2. FURTHER ACTION</p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.</p> <p>3. For further details, see notes to Form PCT/ISA/220.</p>
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Name and mailing address of the ISA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer SHIN, Jun Ho Telephone No. 82-42-481-8129
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001678

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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**WRITTEN OPINION OF THE
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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 16	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1 - 16	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1 - 16	YES
	Claims	NONE	NO

2. Citations and explanations :

The present invention discloses a method for initiating uplink signaling proactively by the multimedia multicast/broadcast service(MBMS) user equipment(UE), comprising steps of: the UE moving to a new cell; listening to information on a MBMS control channel; initiating an uplink signaling according to information on the MBMS control channel; sending a response message to the UE by a Radio Network Controller(RNC), or if no UE moving to the new cell, initiating the uplink signaling proactively by the UE if the information received from the MBMS control channel includes an indication for UE counting.

The prior art neither teach nor fairly suggest the method of the present invention. Therefore, the subject matter of Claims 1-16 is considered to have novelty, an inventive step and industrial applicability.

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PATENT COOPERATION TREATY

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P12220-PCT	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/KR2004/001678	International filing date (<i>day/month/year</i>) 08 JULY 2004 (08.07.2004)	(Earliest) Priority Date (<i>day/month/year</i>) 09 JULY 2003 (09.07.2003)
Applicant SAMSUNG ELECTRONICS CO., LTD. et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2004/001678

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 H04B 7/26**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC H04B 7/26; H04Q 7/20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

KOREAN PATENTS AND APPLICATIONS FOR INVENTIONS SINCE 1975

KOREAN UTILITY MODELS AND APPLICATIONS FOR UTILITY MODELS SINCE 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

KIPONET, DELPHION & Keywords : MBMS, uplink, initiate, cell, update, count and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/017523 A1 (Siemens Aktiengesellschaft) 27 February 2003 * abstract *	1 - 16
A	WO 01/80590 A1 (NTT DoCoMo, Inc.) 25 October 2001 * the whole document *	1 - 16
A	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Introduction of the Multimedia Broadcast Multicast Service (MBMS) in the Radio Access Network (RAN) Stage 2 (Release 6) ; 3GPP TS 25.346 V2.0.0 (2003-06) * page 7-13 * * retrieved at http://www.3gpp.org/ftp/Specs/html-info/25346.htm *	1 - 16
A	3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Multimedia Broadcast/Multicast Service (MBMS); Architecture and functional description (Release 6) ; 3GPP TR 23.846 6.1.0 (2002-12) * page 76-86 * * retrieved at http://www.3gpp.org/ftp/Specs/html-info/23846.htm *	1 - 16

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 OCTOBER 2004 (18.10.2004)

Date of mailing of the international search report

18 OCTOBER 2004 (18.10.2004)

Name and mailing address of the ISA/KR



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Authorized officer

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/001678

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
WO	01/80590	A1	2001-10-25	CN	1372780	T	2002-10-02
				EP	1185125	A1	2002-03-06
				JP	2001-298408	A	2001-10-26
				JP	2001-308856	A	2001-11-02
				JP	2002-171548	A	2002-06-14
				US	2002-106985	A1	2002-08-08
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WO	03/017523	A1	2003-02-27	DE	10154428	A1	2003-03-06
				EP	1415411	A1	2004-05-06